

Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A method for identifying an inhibitor of a dual substrate enzyme; wherein a first substrate is a macromolecule that is enzymatically modified, in the presence of the dual substrate enzyme, to accept a radiolabeled portion of a second substrate, said method comprising:

- a. adding a capture resin to a buffered mixture of an enzyme, allowing the enzyme to catalyze transfer of the radiolabeled portion of the radiolabeled second substrate to a non-radiolabeled first substrate, in the presence or absence of a test compound;
- b. removing unreacted radiolabeled second substrate;
- c. adding a scintillant resin to an enzyme-radiolabeled first substrate mixture;
- d. measuring the amount of radiolabeled first substrate reacted in the presence of the test compound by scintillation counting, measuring the amount of radiolabeled first substrate reacted in the absence of the test compound by scintillation counting, and comparing the two measurements; and
- e. wherein when the amount of reacted first substrate is lower in the presence of a test compound than in the absence of the test compound, the test compound is identified as an inhibitor.

Claim 2 (previously presented): A method according to Claim 1 wherein the first substrate is a peptide or protein.

Claim 3 (original): A method according to claim 2 wherein the first substrate is an acyl carrier protein (ACP).

Claim 4 (previously presented): A method according to Claim 1 wherein the enzyme is a fatty acid biosynthesis enzyme.

Claim 5 (previously presented): A method according to Claim 1 wherein the enzyme is a phosphate transfer enzyme.

Claim 6 (previously presented): A method according to Claim 5 wherein the enzyme is a protein kinase or protein phosphatase enzyme.

Claim 7 (previously presented): A method according to Claim 1 wherein the capture resin is an ionically charged resin.

Claim 8 (original): A method according to claim 1 or 7 wherein the scintillant is a scintillation proximity assay resin (SPA) as the scintillant used for measuring the radiolabeled first substrate.

Claim 9 (original): A method according to claim 1 wherein unreacted radiolabeled second substrate is removed by filtration.

Claim 10 (original): A method according to claim 9 wherein the filtration of radiolabeled second substrate is carried out using an automated filtration and washing apparatus.